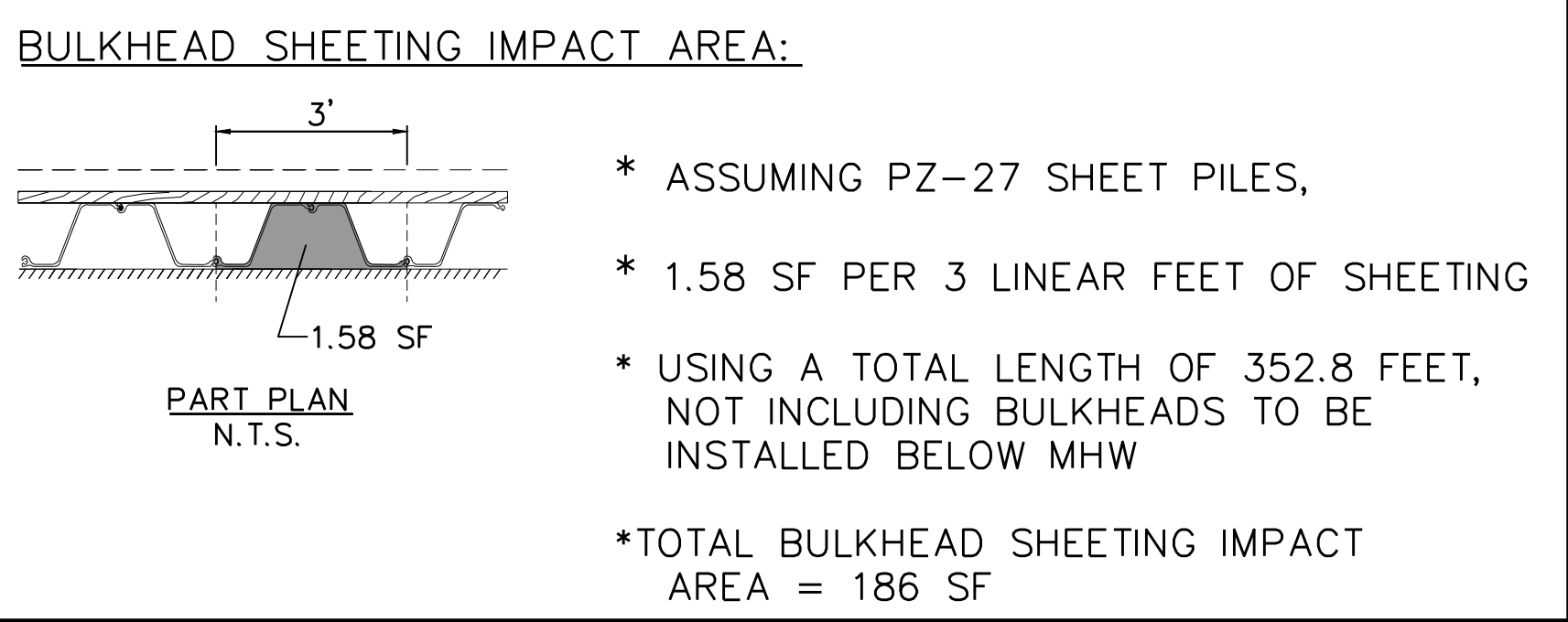
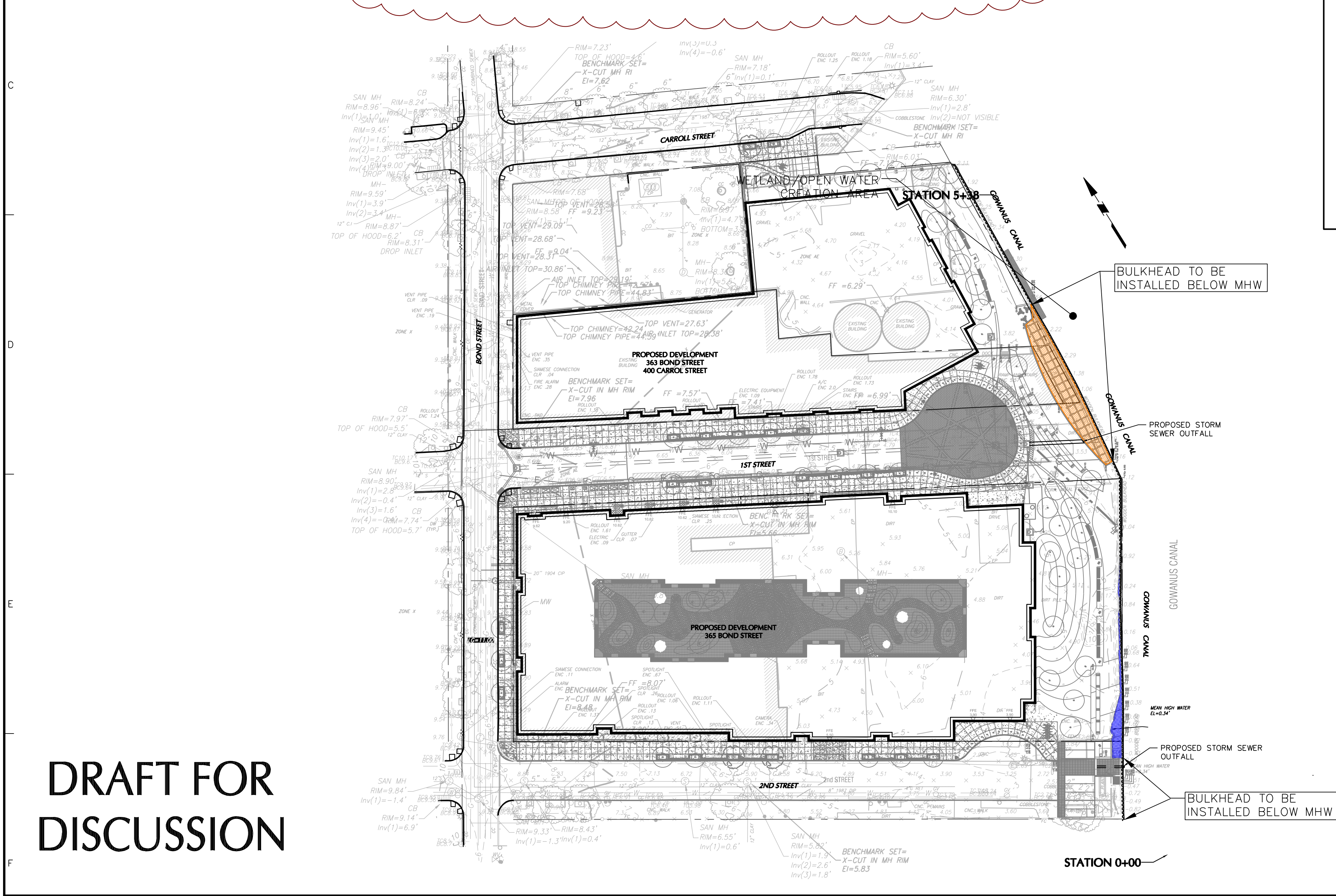
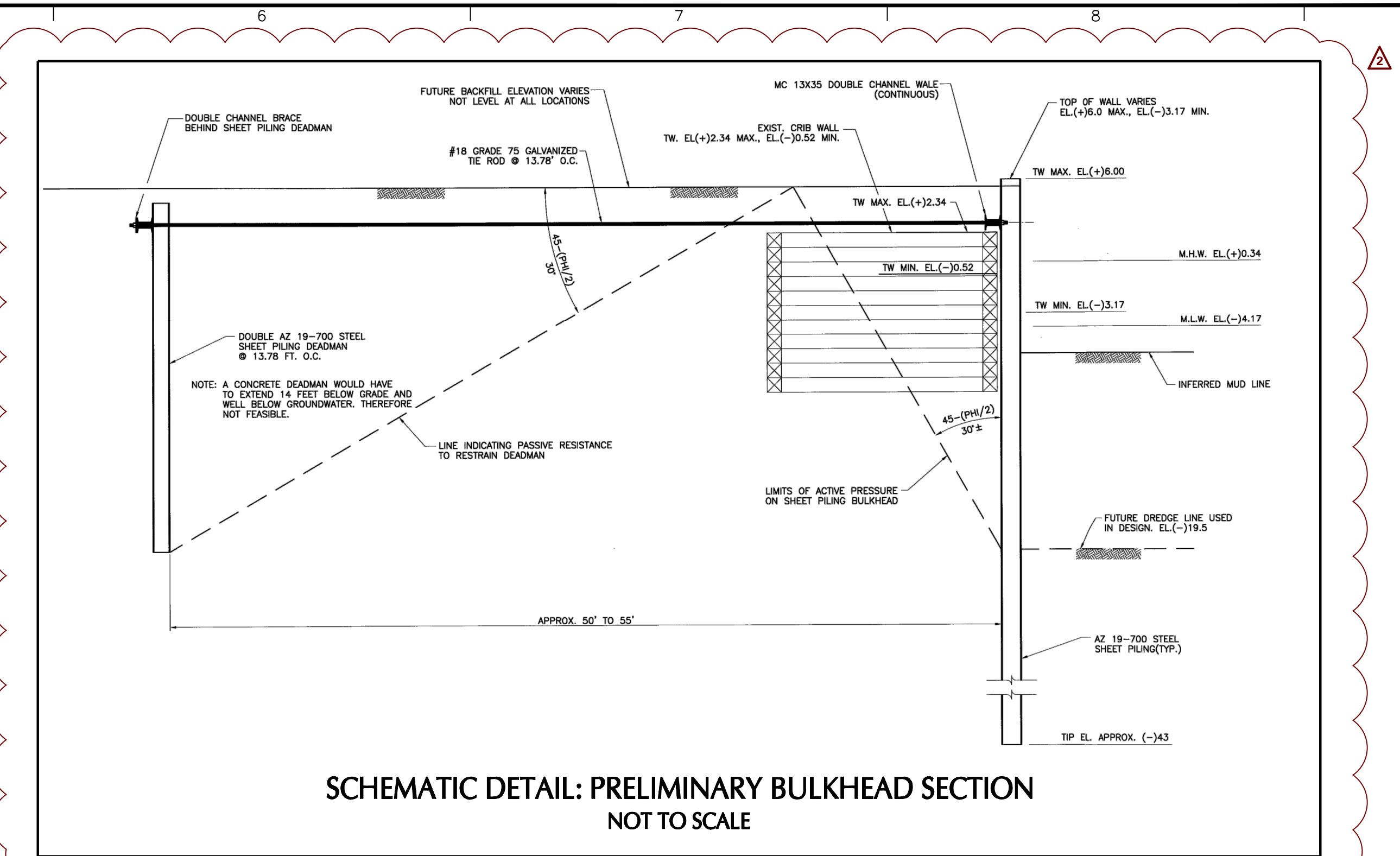


BULKHEAD ALIGNMENT PROFILE



- EXISTING WETLAND / OPEN WATER TO BE FILLED
- NEW WETLAND / OPEN WATER AREA
- TOTAL AREA = 1,874 SF

- BELOW MHW = 520 SF
- BELOW SHW = 609 SF

- TOTAL AREA = 1,874 SF

- REFERENCES AND NOTES:
1. EXISTING INFORMATION BASED ON DRAFT SURVEY ENTITLED "TOPOGRAPHIC & BOUNDARY SURVEY", PREPARED BY LANGAN, DATED 1-18-13.
 2. PROPOSED SITE PLAN BACKGROUND BASED ON ELECTRONIC DRAWINGS BY AKRF ENGINEERING, P.C. RECEIVED ON 5-13-13.
 3. MEAN HIGH WATER AND SPRING HIGH WATER ELEVATIONS ARE BASED ON INFORMATION OBTAINED FROM THE BROOKLYN BRIDGE, NY STATION 8517847.
 4. EXTENTS OF NEW WETLAND/OPEN WATER AREA BASED ON PLAN ENTITLED "ESPLANADE MATERIALS PLAN" PREPARED BY LEE WEINTRAUB LANDSCAPE ARCHITECTURE, LLC DATED 5/28/2013.
 5. THE PROPOSED SHEETING LAYOUT SHOWN ON THIS DRAWING PRESUMES THE SHEETING CAN BE INSTALLED VERY CLOSE TO THE OUTSIDE FACE OF THE EXISTING BULKHEAD STRUCTURE. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR INVESTIGATING THE CONDITIONS OF THE EXISTING VERTICAL TIMBER PILES ALONG THE BULKHEAD THE SUBSURFACE CONDITIONS WITHIN THE CANAL, THE PRESENCE OF ANY OTHER POTENTIAL OBSTRUCTIONS IN THE CANAL, AND FOR REMOVING THESE OBSTRUCTIONS, AS NECESSARY, SO THE SHEETING CAN BE INSTALLED AS INDICATED ON THIS LAYOUT.
 6. SHEET PILE WALL CONCEPT FROM PLAN ENTITLED "SHEET PILE WALL CONCEPT PART PLAN AND SECTION" PREPARED BY LANGAN, DATED 4/24/13.
 7. PROPOSED STORM SEWER AND OUTFALL INFORMATION FROM DRAWING ENTITLED "C104.00 - GRADING & DRAINAGE PLAN" DATED 05/01/13 PREPARED BY AKRF ENGINEERING, P.C.
 8. SPONGE PARK SHOWN FOR REFERENCE ONLY. PROPOSED BY DLANDSTUDIO; REFER TO DESIGN PLANS DATED 10/01/2012.
 9. FOR WETLAND ELEVATIONS SEE DRAWING ENTITLED "ESPLANADE SECTIONS" PREPARED BY LEE WEINTRAUB LANDSCAPE ARCHITECTURE, LLC, DATED 06/06/2013.
 10. TIE-BACKS ANCHORS AND/OR WHALERS MAY BE REQUIRED. MAY REQUIRE MINOR MODIFICATION OF EXISTING TIMBER STRUCTURE AND PROPOSED NEW TIMBER FENDER SYSTEM.
 11. SCHEMATIC DETAIL PREPARED BY PROSPECTIVE BULKHEAD CONTRACTOR AND IS PROVIDED FOR INFORMATION PURPOSES ONLY.

WARNING: IT IS A VIOLATION OF THE NYS EDUCATION LAW ARTICLE 145 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS ITEM IN ANY WAY.

Date	Description	No.
REVISIONS		
8/12/13	REVISED PROFILE AND NOTE	1
10/2/13	ADDED SOIL SOLUTIONS' DETAIL	2

LANGAN

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Langan Engineering, Environmental, Surveying and Landscape Architecture, P.C.
Langan Engineering and Environmental Services, Inc.
Langan International LLC
Langan Limited
Langan (UK) Limited

NJ CERTIFICATE OF AUTHORIZATION No. 24GA27396400

Project

CARROLL GARDENS DEVELOPMENT

BROOKLYN NEW YORK

Drawing Title

WETLAND / OPEN WATER IMPACT PLAN w/ BULKHEAD PROFILE

Project No.	100287501	Drawing No.	WP101
Date	07/01/13	Scale	1" = 50'
Scale	1" = 50'	Drawn By	LMT
Submission Date	-	Sheet	### of ###

DRAFT FOR DISCUSSION